In th Claims:

1. (Twice Amended) A gas separator for fuel cells, said fuel cells being constructed as a laminate of plural members including an electrolyte layer and electrode layers, said gas separator being included in said fuel cells as one of said plural members and having rugged shapes that are formed in both faces to define a flow path of a fluid passing through inside said fuel cells, a cooling fluid for cooling down the inside of the fuel cells is introduced as a fluid passing through the flow path defined by at least one of the rugged shapes;

wherein at least two plates with the rugged shapes formed in respective one faces thereof are bonded to each other across the respective other faces thereof to form said gas separator,

said gas separator comprising a member that is located in a space defined by the rugged shapes between said at least two plates to be in contact with said two plates.

4. (Twice Amended) A gas separator for fuel cells in accordance with claim 1, wherein each of said at least two plates is a metal plate.

5. (Twice Amended) A gas separator for fuel cells in accordance with claim 1, wherein the fluid passing through the flow path defined by the rugged shapes in said fuel cells is one of a hydrogen containing gaseous fuel, an oxygen containing oxidizing gas, and a cooling fluid for cooling down the inside of said fuel cells.

6. (Twice Amended) A gas separator for fuel cells in accordance with claim 4, wherein said at least two plates are mainly composed of either one of stainless steel and aluminum.

7. (Amended) A fuel cells stack receiving supplies of a hydrogen-containing gaseous fuel and an oxygen-containing oxidizing as and generating an electromotive force through electrochemical reactions,

said fuel cell stack comprising gas separators for fuel cells in accordance with claim 1.

8. (Twice Amended) A method of manufacturing a gas separator for fuel cells, said fuel cells being constructed as a laminate of plural members including an electrolyte layer and electrode layers, said gas separator being included in said fuel cells as one of said plural members and having rugged shapes that are formed in both faces to define a flow path of a fluid passing through inside said fuel cells, a cooling fluid for cooling down the inside of the fuel cells is introduced as a fluid passing through the flow path defined by at least one of the rugged shapes;

said method comprising the steps of:

(a) providing at least two plates that have the rugged shapes formed in respective one faces thereof, and

(b) bonding said at least two plates to each other across the respective other faces thereof to form said gas separator,

wherein said step (b) comprises the step of:

(b-1) locating a member in a space defined by the rugged shapes between said at least two plates to be in contact with said at least two plates in the course of bonding said at least two plates to each other.

9. (Twice Amended) A method in accordance with claim 8, wherein said member located between said at least two plates in said step (b-1) is an electrically conductive material.

10. (Twice Amended) A method of manufacturing a gas separator for fuel cells, said fuel cells being constructed as a laminate of plural members including an electrolyte layer and electrode layers, said gas separator being included in said fuel cells as one of said plural members and having rugged shapes that are formed in both faces to define a flow path of a fluid passing through inside said fuel cells, a cooling fluid for cooling down the inside of the fuel cells is introduced as a fluid passing through the flow path defined by at least one of the rugged shapes;

said method comprising the steps of:

(a) providing at least two plates;

(b) laying said at least two plates one upon the other via a material that forms a member and is interposed between said at least two plates; and

(c) press molding said at least two plates laid one upon the other in said step (b), so as to form the rugged shapes in surfaces of said at least two plates simultaneously with bonding said at least two plates to each other,

wherein said step (c) comprises the step of:

(c-1) forming said member in a space defined by the rugged shapes between said at least two plates to be in contact with said at least two plates.

11. (Amended) A method in accordance with claim 8, wherein each of said at least two plates is a metal plate.

12. (Twice Amended) A gas separator for fuel cells, said fuel cells being constructed as a laminate of plural members including an electrolyte layer and electrode layers, said gas separator being included in said fuel cells as one of said plural members and having a rugged shape that is formed in surface thereof to define a flow path of a fluid passing through inside said fuel cells,

said gas separator comprising:

a separator base plate unit that is composed of a plate and has a plurality of apertures passing through a thickness of said separator base plate unit;

insert members that are mainly composed of an electrically conductive material and are respectively inserted into said plurality of apertures to form a convex structure on at least one face of said separator base plate unit; and

a coat layer that is mainly composed of an electrically conductive material and covers over at least surface of said separator base plate unit and said insert members inserted into said separator base plate unit, which is in contact with an adjacent member adjoining to said gas separator in said fuel cells.

13. (Amended) A fuel cell stack receiving supplies of a hydrogen-containing gaseous fuel and an oxygen-containing oxidizing gas and generating an electromotive force through electrochemical reactions,

said fuel cell stack comprising gas separators for fuel cells in accordance with claim 12.

14. (Twice Amended) A method of manufacturing a gas separator for fuel cells, said fuel cells being constructed as a laminate of plural members including an electrolyte layer and electrode layers, said gas separator being included in said fuel cells as one of said plural members and having a rugged shape that is formed in surface thereof to define a flow path of a fluid passing through inside said fuel cells,

said method comprising the steps of:

(a) providing a separator base plate unit composed of a plate;

(b) perforating said separator base plate unit at positions to form a plurality of apertures passing through a thickness of said separator base plate unit;

(c) inserting insert members, which are mainly composed of an electrically conductive material, respectively into said plurality of apertures, so as to form the rugged shape in surface of said separator base plate unit; and

(d) forming a coat layer that is mainly composed of an electrically conductive material and covers over at least surface of said separator base plate unit and said insert members inserted into said separator base plate unit, which is in contact with an adjacent member adjoining to said gas separator in said fuel cells.

16. (Amended) A method in accordance with claim 8, wherein said member located between said at least two plates in said step (b-1) is a thermally conductive material.

17. (Amended) A method in accordance with claim 10, wherein the material that forms said member is an electrically conductive material.

18. (Amended) A method in accordance with claim 10, wherein the material that forms said member is a thermally conductive material.

19. (Amended) A method in accordance with claim 16, wherein each of said at least two plates is a metal plate.

20. (Amended) A method in accordance with claim 11, wherein said at least two plates are mainly composed of either one of stainless steel and aluminum.

21. (Amended) A gas separator for fuel cells, said fuel cells being constructed as a laminate of plural members including an electrolyte layer and electrode layers, said gas separator being included in said fuel cells as one of said plural members and having a rugged shape that is formed in surface thereof to define a flow path of a fluid passing through inside said fuel cells,

said gas separator comprising:

a separator base plate unit that is composed of a plate and has a plurality of apertures passing through a thickness of said separator base plate unit;

insert members that are mainly composed of an electrically conductive material and are respectively inserted into said plurality of apertures to form a convex structure on at least one face of said separator base plate unit; and

a coat layer that covers over at least surface of said separator base plate unit and said insert members inserted into said separator base plate unit, which forms the flow path of the fluid in said fuel cells.

22. (Amended) A fuel cell [cells] stack receiving supplies of a hydrogen-containing gaseous fuel and an oxygen-containing oxidizing gas and generating an electromotive force through electrochemical reactions,

said fuel cell stack comprising gas separators for fuel cells in accordance with claim 21.

23. (Amended) A method of manufacturing a gas separator for fuel cells, said fuel cells being constructed as a laminate of plural members including an electrolyte layer and electrode layers, said gas separator being included in said fuel cells as one of said plural members and having a rugged shape that is formed in surface thereof to define a flow path of a fluid passing through inside said fuel cells,

said method comprising the steps of:

(a) providing a separator base plate unit composed of a plate;

(b) perforating said separator base plate unit at positions to form a plurality of apertures passing through a thickness of said separator base plate unit;

(c) inserting insert members, which are mainly composed of an electrically conductive material, respectively into said plurality of apertures, so as to form the rugged shape in surface of said separator base plate unit; and

(d) forming a coat layer that covers over at least surface of said separator base plate unit and said insert members inserted into said separator base plate unit, which forms the flow path of the fluid in said fuel cells.

24. (Amended) A method in accordance with claim 10, wherein each of said at least two plates is a metal plate.

25. (Amended) A method in accordance with claim 12, wherein said plate is mainly composed of either one of stainless steel and aluminum.

26. (Amended) A method in accordance with claim 14, wherein said plate is mainly composed of either one of stainless steel and aluminum.

REMARKS

Claims 1-26 are pending in the application, and stand rejected. Favorable reconsideration is respectfully requested.

The Abstract was objected to. Withdrawal of this objection is respectfully requested in view of the new Abstract submitted herewith on a separate sheet.